

## ABERRANT THYROID.

REPORT OF A CASE; FROM THE CLINIC OF PROFESSOR KANAVEL AT THE CHICAGO  
POST-GRADUATE HOSPITAL.

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A REVIEW of the literature shows that but sixteen cases of lateral aberrant thyroids have been reported since 1857. Owing to the apparent small number of such cases and the fact that they may play an important rôle in compensating for loss of thyroid tissue proper, it has seemed worth while to report this case of lateral aberrant thyroid, which, while similar in many respects to those previously reported, differs in many important characteristics.

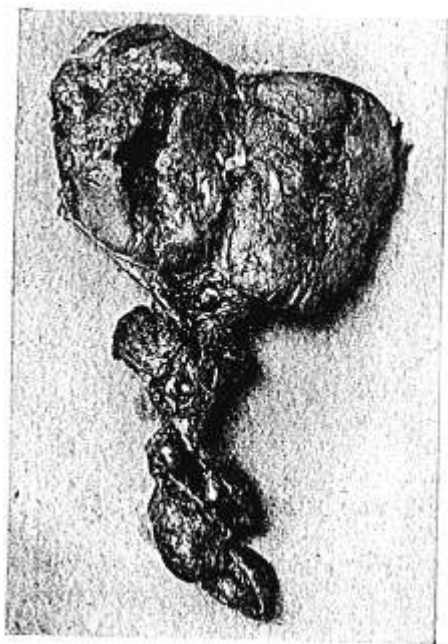
That so few cases have been recognized, may not mean that they are so rare, since the real identity of these little masses may be easily overlooked, as in this case, where the gross appearance was very unlike thyroid tissue, and the diagnosis can seldom be made without the aid of a microscope.

Aberrant thyroid has been defined as a tissue mass located at a definite distance from the thyroid proper not connected with the thyroid and having the structure of a normal or pathological thyroid gland.

Aberrant thyroids may be classified from the standpoint of embryology as, (a) median, formed from remnants of the thyroglossal duct; (b) lateral, from remnants of lateral analges of the thyroid. As to topography the hyoid bone may be taken as the dividing line for the median and lateral, into superior above and inferior below the hyoid. The greater number are found in the anterior triangle of the neck, and occasionally they may be found in the lateral.

CASE HISTORY.—Mrs. E. N., age 26, German housewife, entered the hospital December 13, 1906; discharged December 14, 1906.

FIG. 1.



Photograph of the tumor dissected (same size as tumor); at lower pole three or four smaller accessory thyroids are seen

FIG. 2.



Photomicrograph of cut section showing embryonic acini, with here and there fully developed acini filled with colloid material.

Personal History: Married; no children; habits good.

Family History: Negative; no others in the family had masses in the neck.

Previous Illness: Always enjoyed fairly good health.

Menstrual History: Negative; no enlargement of tumor mass during menstruation.

Present Trouble: The patient states that two and a half years ago she noticed a small tumor on the left side of her neck, which has gradually increased in size until the present time. It has not been associated with any other symptoms or signs, general health and strength unimpaired. It has given her no pain nor has it been tender, and the only complaint is that it has been somewhat unsightly.

*Examination.*—On the left side of the neck opposite the hyoid bone, apparently covered by the platysma and the sternomastoid muscle, is found a tumor, approximately the size and shape of a goose egg, with the smaller end directed downward in the direction of the sternum. It is not tender and there is no fluctuation. The skin is apparently not connected with the tumor, since it can be moved over the surface without difficulty. No other enlargement can be noted on either side of the neck. The thyroid gland can be demonstrated in its proper location, there are no glandular enlargements in other parts of the body, the examination of the lungs, heart and other viscera shows nothing abnormal. The patient states she has had the ordinary diseases of childhood and denies venereal infection.

*Operation.*—Ether anæsthetic by Dr. Barrett. Operator, Dr. Kanavel; assisted by Dr. Matthews. Incision was made on a line drawn from the tip of the mastoid to the cornu of the hyoid bone. Skin, subcutaneous tissue, and platysma were incised. The mass was found to be a solid tumor, lying opposite the hyoid bone, projecting under the anterior border of the sternomastoid muscle and on separating it from the adjacent tissues it was found to be in juxtaposition to the carotid artery and jugular vein. It was separated without difficulty, except at its lower end where it seemed to be continuous with three or four small glands or tumor bodies decreasing in size, the largest at the upper end, the size of a small walnut, and the smallest, at the lower end not larger than a grain of wheat. These were all united by firm fibrous tissue and the lowest lay close to the capsule of the thyroid gland, which was demonstrated to be present.

In removing this lower prolongation, a second incision was necessary, passing downward from the first along the anterior border of the sternomastoid muscle. The platysma was drawn together with two or three catgut sutures, the skin wound closed with interrupted silkworm-gut sutures with silkworm-gut drain inserted at the lowest point.

*Subsequent History.*—Silkworm-gut drain removed in eight hours. Silkworm-gut sutures removed in five days. The patient made an uninterrupted recovery and has had no subsequent symptoms of any kind.

*Examination of the Tumor.*—The specimen consists of five tumor masses; the upper and largest, size of a walnut; the lower and smallest, a grain of wheat. Each mass has a separate capsule, of a yellow color, firm and very slightly vascular, the entire mass being connected and held together by fibrous tissue. On cut section the large tumor mass measured on its cut surface 5 cm. and to gross appearance presented a mottled grayish surface suggestive of sarcoma tissue. It is not so white as carcinomatous masses would appear. It did not present the characteristic color of the thyroid gland. The tissue was of firm consistency showing no tendency to cystic degeneration. The cut section of the smaller masses showed the characteristic color and consistency of thyroid tissue; the tissue of neither, however, was friable, but was firm and did not bulge above the flat surface on cut section. The microscopic examination shows the structure in large and small masses to be practically the same, presenting in general the picture of a thyroid except that numerous embryonic follicles are to be found with some epithelial proliferation in the acini and here and there accumulations of colloid.

Schrager has discussed this subject fully in *Surgery, Gynecology and Obstetrics* of October, 1906. This case is similar to his in general findings and microscopical appearance, but differs from his cases in gross appearance and cut section, the tumor described by Schrager having the appearance of the normal thyroid both in the uncut and cut sections, and showed a tendency to cystic degeneration, while ours was a strictly solid tumor, which, except for the lower prolongations, did not resemble thyroid tissue in any way and

the grayish color of this tumor being especially worthy of note. The probability that these aberrant thyroids are frequently overlooked and mistaken for lymph-nodes or other tumors in this location, should cause us to look more carefully for them and to think of their possible presence in diagnosis of tumors of the neck. Diagnosis may be impossible without the microscope, but the following points may suggest the presence of aberrant thyroid:

1. A tumor located most frequently in the anterior or lateral triangles of the neck.
2. Tumor mass may increase in size during period of menstruation.
3. May be first noticed and increase in size at puberty.
4. Most frequent in women.
5. Growth usually slow and without attendant symptoms unless cyst formation takes place.

It is well to bear in mind the possibility of a compensatory hypertrophy of these masses when the thyroid gland may be destroyed by disease. As a majority of the cases reported by Schrager were cystic and nearly all of them presented the appearance of normal thyroid upon gross examination the grayish color and its lack of resemblance to thyroid tissue in the gross specimen, and on cut section in this case, is worthy of note.

I wish to express my best thanks to Professor Kanavel, who allowed me to study and report this case from his clinic.